REMARKS

This request for reconsideration is made in response to an Office Action dated February 17, 2004, in which the following rejection was made:

Claims 8 and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sievers et al (U.S. Patent No. 3,893,775) in view of Kurashiki (JP 06171012).

Claims 8 and 9 are currently pending in the application. Claims 12-19 were subjected to restriction requirement and are currently withdrawn from consideration; claims 10 and 11 had previously been canceled.

Claims 8 and 9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Sievers et al. in view of Kurashiki. Claim 8 recites a damper having a hub, an inertia mass body, a polymer elastic body such a rubber press-fitted between the hub and the inertia mass body from an axis direction thereof, wherein said polymer elastic body is a vulcanized and molded rubber elastic body; and an organosilane as a non-slip agent is provided at least one of between said hub formed by a metal member and said polymer elastic body and between said inertia mass body formed by a metal member and said polymer elastic body; wherein surface roughness in at least one of a metal surface adhering to the polymer elastic body in said hub and a metal surface adhering to the polymer elastic body in said inertia mass body is within a range of 5 to 50 μmRz (JIS B0601).

The Examiner indicated that Sievers discloses a damper comprising a hub, an inertia mass body, and a polymer elastic body, such as rubber, which is press-fit between the hub and the inertia mass body. The Examiner further indicated that Sievers discloses that at least one of the hub and inertia mass body has a surface roughness of 260 RMS. The Examiner correctly indicated that Sievers fails to disclose an organosilane as a nonslip agent being provided between the hub and the polymer elastic body or the inertia mass body and the polymer elastic body, or both, and that

Sievers also fails to disclose that the polymer elastic body is a vulcanized and molded rubber.

The Examiner asserts that Kurashiki teaches an organsilane as a nonslip agent provided between a metal and vulcanized and molded rubber for the purpose of being used under a corrosive environment and for providing a firm adhesive between the metal surface and the rubber surface. Applicants respectfully disagree, as discussed below.

For a rejection under 35 U.S.C. § 103 to be valid, a motivation or teaching to combine two references must be present in either reference. The Examiner has failed to state any motivation to combine Sievers with Kurashiki, and Applicants contend that there is no such motivation to combine.

The Sievers reference teaches providing a surface roughness to reduce the movement between the rigid members and the elastomeric insert and to extend the fatigue life of the resilient bushing (col. 2, lines 6-11). Sievers further teaches the application of a phosphate coating onto the portions of the rigid member that have been surface roughened (col. 3, lines 27-30). The phosphate coating is to aid in assembly by holding a lubricant and to prevent rust and corrosion of the rigid members after assembly (col. 1, lines 52-57). Thus, Sievers teaches that it has solved the problems of unwanted relative movement between the rigid members and the elastomeric insert, assembly ease and corrosion prevention by providing a level of surface roughness in combination with a phosphate coating.

The Kurashiki reference does not add to the teachings of the Sievers reference. Applicants supply an English language translation of the pertinent portions of the Kurashiki reference, herewith. The Kurashiki reference teaches that an anodic oxidation film is formed on the surface of an aluminum fitting and that an organosilane compound film is formed on the anodic oxidation film (Abstract). Kurashiki further teaches that a rubber damping material is bonded to the surface of the organosilane

compound film through simultaneous vulcanization type adhesive layers (Abstract). The organosilane compound film of Kurashiki is for obtaining "bonding stability of the adhesive layer with respect to the surface of the metal fitting" (paragraph [0010], translation supplied). Thus, the organosilane compound film of Kurashiki is a "bonding stability" agent, not a non-slip agent as recited in claim 8. Thus, Kurashiki does not teach or suggest that the organosilane compound film is used as a non-slip agent. Rather, Kurashiki teaches that it is the vulcanization type adhesive layers that are the non-slip agents. Further, Kurashiki fails to teach a surface roughness of at least one of the metal surfaces adhering to the polymer elastic body of 5 to 50 μmRz as recited in claim 8. Kurashiki teaches that it is impossible to form the organosilane compound film on the surface of the metal fitting without the imposition of the anodic oxidation film between the metal surface and the organosilane compound film (paragraph [0011], translation supplied). Kurashiki teaches that the inability of the organosilane compound film to adhere to the metal fitting is overcome by the interposed anodic oxidation film. Thus, Kurashiki provides no motivation, teaching or suggestion to provide a rough surface on the metal fittings to aid in restricting relative movement between the metal fittings and the rubber damping material or to aid in the adherence of the organosilane compound film to the metal fitting, as Kurashiki has overcome these potential problems by supplying the interposed anodic oxidation film.

Furthermore, a person of ordinary skill in the art would not be motivated to combine the teachings of Sievers with the teachings of Kurashiki. Sievers teaches a resilient bushing having a surface roughness and a phosphate coating. Kurashiki teaches a damper having an anodic oxidation film in combination with an organosilane film and vulcanization type adhesive layers. The use of the phospate coating of Sievers is incompatible with the anodic oxidation/organosilane compound film/adhesive layers of Kurashiki. The absence of any motivation to combine the Sievers reference with the Kurashiki reference, and indeed, the incompatibility of the Sievers and Kurashiki approaches to solving the problems addressed in the present invention, renders the rejection under 35 U.S.C. § 103 improper, and therefore, the rejection of claim 8 should be withdrawn and claim 8 passed to issue.

Claim 9 depends from claim 8 and recites additional subject matter. Therefore, for at least the reasons discussed above, the Sievers and the Kurashiki references, either alone or in combination, do not render claim 9 of the present invention obvious. Therefore, rejection of claim 9 under 35 U.S.C. § 103 should be withdrawn and claim 9 passed to issue.

As Applicants have addressed all objections and rejections raised by the Examiner, it is respectfully requested that the Examiner reconsider and withdraw the stated objections and rejections, allow claims 8 and 9 and pass the present application on to issuance.

Applicants believe that no additional fees are due. In the event additional fees or charges are due, please charge them to Deposit Account 13-0235.

Respectfully submitted,

By Marina Cunningham

Marina F. Cunningham
Registration No. 38,419
Attorney for Applicants

McCormick, Paulding & Huber LLP
CityPlace II,185 Asylum Street
Hartford, CT 06103-3402
(860) 549-5290

Appl. No. 09/936,538
Response dated May 17, 2004
Reply to Office Action of Feb. 17, 2004

APPENDIX A

ENGLISH TRANSLATION OF PORTION OF JAPANESE PATENT LAID-OPEN NO. 6-171012

ENGLISH TRANSLATION

Japanese Patent Laid-Open No. 6-171012

...

[0007] That is, an object of the present invention is to attain prevention of rusting of the metal fitting made of aluminum system metal without causing problems by environment pollution and troubles of manufacture, and improvement of the bonding stability between the metal fitting and a damping rubber material.

...

[0010] In these means, corrosion resistance of the metal fitting is obtained, by the anodic oxidation film and the organosilane compound film on the surface of the metal fitting, and the bonding stability of the adhesive layers with respect to the surface of the metal fitting is obtained by the organosilane compound film. Further, the organosilane compound film is certainly generated by the anodic oxidation film.

[0011] That is, the above-mentioned silane coupling agent has: an alkoxy group or a hydrolysable substituent such as halogen; and a group easily reacting with an organic substance such as a vinyl group, epoxy group, or amino group, and the silane coupling agent is combined with the anodic oxidation film (Al_2O_3) on the surface of the metal fitting by the former substituent, whereby the organosilnae compound film is formed and the above-mentioned metal fitting is protected from corrosion. In this case, if the metal fitting remains a substrate, some on the surface thereof is usually portions in which Al_2O_3 is not formed. Therefore, it is impossible to form the organosilane compound film on the entire surface of the metal fitting. Namely, the above-mentioned anodic oxidation film is made of Al_2O_3 combined with the above-mentioned silane coupling agent, and an existing rate of Al_2O_3 on the surface of the metal fitting becomes high by forming the above-mentioned anodic oxidation film, whereby the above-mentioned organosilane compound film can be almost complementally formed on the entire surface of the metal fitting.

...